

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An encoding apparatus for executing an encoding process with an encoding system capable of treating at least B-pictures as pictures for inter-prediction-encoding, the encoding apparatus comprising:

longest delay calculation means for calculating a longest picture encoding delay for encoding the pictures in the encoding apparatus based on encode conditions;

timing calculation means for, anticipating that a plurality of encoded information created by performing the encoding process will be sequentially decoded on a decoding side, calculating output timing for results of decoding the encoded information; and

timing notification means for notifying said decoding side of output timing calculated by said timing calculation means before a result of decoding corresponding encoded information is obtained.

Claim 2 (Currently Amended): The encoding apparatus according to Claim 1, wherein said timing calculation means calculates the output timing for the results of decoding the encoded information according to a difference between the longest picture encoding delay and the delay to encode the encoded information so as to immediately output a result of decoding encoded information having a longest period of time out of periods of time after the encoding process is started until encoded information is outputted.

Claim 3 (Currently Amended): An encoding method of executing an encoding process with an encoding system capable of treating at least B-pictures as pictures for inter-prediction-encoding, said encoding method comprising:

calculating a longest picture encoding delay for encoding the pictures in the encoding

apparatus based on encode conditions:

~~a first step of, anticipating in anticipation~~ that a plurality of encoded information created by performing said encoding process are sequentially decoded on a decoding side, calculating output timing for results of decoding the encoded information; and

~~a second step of~~ notifying said decoding side of output timing calculated in said first step before a result of decoding corresponding encoded information is obtained.

Claim 4 (Currently Amended): The encoding method according to Claim 3, wherein[.]

~~in said first step, the calculating output timing for the results of decoding the encoded information calculates the output timing according to a difference between the longest encoding delay and the delay to encode the encoded information are calculated so as to immediately output a result of decoding encoded information having a longest period of time out of periods of time after the encoding process is started until encoded information is outputted.~~

Claim 5 (Currently Amended): A decoding apparatus for executing a decoding process on a plurality of encoded information encoded with an encoding system capable of at least B-pictures as pictures for inter-prediction-encoding, said decoding apparatus comprising:

storage means for temporarily storing restored image information sequentially created by the decoding process and for temporarily storing the encoded information; and

output control means for controlling output of the restored image information stored in said storage means, wherein

said output control means, when restored image information fails to be stored in said

storage means ~~is failed~~, re-outputs restored image information outputted just before the failure and ignores a decoding start time set for a first encoded information of a plurality of encoded information stored in said storage means, to start decoding prior to the decoding start time of the first encoded information.

Claim 6 (Currently Amended): The decoding apparatus according to Claim 5, wherein:

~~said storage means temporarily stores each piece of the encoded information; and said output control means ignores a decoding start time set for first encoded information stored in said storage means, immediately starts decoding of the first encoded information and, when a failure occurs, offsets a lag from the decoding start time that occurred due to ignoring the decoding start time ignorance, by re-outputting restored image information outputted just before the failure.~~

Claim 7 (Currently Amended): The decoding apparatus according to Claim 5, wherein:

~~said storage means temporarily stores each piece of the encoded information; and said output control means, when a storing order of encoded information being stored in said storage means is different from an order before the encoding, re-outputs restored image information corresponding to the encoded information having a different order.~~

Claim 8 (Currently Amended): A decoding method for executing a decoding process on a plurality of encoded information encoded with an encoding system capable of at least B-pictures as pictures for inter-prediction-encoding, said decoding method comprising:

temporarily storing each of the encoded information before the decoding;

a ~~first step~~ of temporarily storing restored image information successively created by the decoding process;

a ~~second step~~ of outputting the restored image information to be stored; and

ignoring a decoding start time for a first encoded information of the plurality of encoded information;

starting decoding of the first encoded information prior to the decoding start time of the first encoded information; and

a ~~third step~~ of, when restored image information ~~fails~~ to be stored in said storing is failed, re-outputting restored image information outputted just before the failure.

Claim 9 (Currently Amended): The decoding apparatus according to Claim 8, wherein,

~~said first step includes~~

~~a decoding start step of temporarily storing each piece of the encoded information before the decoding process, and~~

~~a step of ignoring a decoding starting time set for first encoded information stored and immediately starting decoding of the first encoded information; and~~

~~said third step includes~~, when the failure occurs, offsetting a lag from the decoding start time that occurred due to ignoring the decoding start time by re-outputting restored image information outputted just before the failure.

Claim 10 (Currently Amended): The decoding method according to Claim 8, wherein further comprising:

~~a judgement step of temporarily stores each piece of the encoded information before the decoding process, and~~

~~a step of judging whether a storing order of each piece of the encoded information stored is different from an order before the encoding process; and said third step, when a judgement judgment result indicative of a difference is obtained by said judgement step judging, re-outputting re-outputs restored image information corresponding to encoded information having a different order.~~

Claim 11 (New): An encoding apparatus for executing an encoding process with an encoding system capable of treating at least B-pictures as pictures for inter-prediction-encoding, the encoding apparatus comprising:

    a longest encoding delay calculation unit to calculate a longest encoding delay for encoding the pictures in the encoding apparatus based on encode conditions;

    a timing calculation unit to, anticipating that a plurality of encoded information created by performing the encoding process will be sequentially decoded on a decoding side, calculate output timing for results of decoding the encoded information; and

    a timing notification unit to notify said decoding side of output timing calculated by said timing calculation unit before a result of decoding corresponding encoded information is obtained.

Claim 12 (New): The encoding apparatus according to Claim 1, wherein the notification means adds the output timing as header information to the encoded information.

Claim 13 (New): A decoding apparatus to execute a process on a plurality of encoded information encoded with an encoding system capable of at least B-pictures as pictures for inter-prediction-encoding, said decoding apparatus comprising:

    a storage unit to temporarily store restored image information sequentially created by

the decoding process and to temporarily store the encoded information; and  
an output control unit to control output of the restored image information stored in  
said storage unit, said output control unit, when restored image information fails to be stored  
in said storage unit, re-outputs restored image information outputted just before the failure  
and said output control unit ignores a decoding start time set for a first encoded information  
of a plurality of encoded information stored in said storage unit, to start decoding prior to the  
decoding start time of the first encoded information.